IN THE CLAIMS:

1. (Amended) A method for preparing a pharmaceutically or nutraceutically effective composition which comprises adding to said composition a compound ~~Use of compounds~~ of formula

R-X

wherein X is a primary alcoholic functional group $-CH_2OH$, a carboxylic functional group —COOH or a C_1-C_4 alkyl ester group, and of mono-, di- and tri-glycerides of acid compounds R-COOH and of pharmaceutically acceptable salts of those acids,

wherein R is a hydrocarbon chain having from 23 to 35 carbon atoms, which is saturated or unsaturated, including from one to five ethylenic or acetylenic unsaturations, linear or branched, including from one to five methyl branches, and optionally substituted by from one to three hydroxyl groups. ~~, for the preparation of pharmaceutical or nutraceutical compositions useful for the treatment and prevention of pathologies related to a high concentration of cholesterol and lipids, and pathologies associated with an increased ability of blood platelets to aggregate and with a reduced concentration of oxygen~~.

2. (Amended) A method for preparing pharmaceutical or nutraceutical compositions useful for the preparation of pharmaceutical or nutraceutical compositions useful for the treatment and prevention of peripheral vascular diseases and peripheral neuropathies which comprises adding to said composition a compound ~~Use of compounds~~ of formula R-X wherein X is a primary alcoholic functional group – CH_2OH, a carboxylic functional group –COOH or a C_1-C_4 alkyl ester group, and of mono-, di- and tri-glycerides of acid compounds R-COOH and of pharmaceutically acceptable salts of those acids, wherein R is a hydrocarbon chain having from 19 to 35 carbon atoms, which is saturated or unsaturated, including from one to five ethylenic or acetylenic unsaturations, linear or branched, including from one to five methyl branches, and optionally substituted by from one to three hydroxyl groups. ~~for the preparation of pharmaceutical or nutraceutical compositions useful for the treatment and prevention of peripheral vascular diseases and peripheral neuropathies.~~

3. (Amended) ~~Use of compounds as defined in claim 1, for the preparation of pharmaceutical or nutraceutical compositions~~ A method according to claim 1 wherein said composition is pharmaceutically useful in the treatment or prevention of atherosclerosis, hypercholesterolaemia, cardiovascular diseases of the ischaemic or atherosclerotic type, peripheral vascular diseases and peripheral neuropathies.

4. (Amended) ~~Use of compounds according to claim 1, for the preparation of pharmaceutical or nutraceutical compositions~~ A method according to claim 1 wherein said composition is pharmaceutically useful in the treatment of ageing processes in humans, in particular cerebral ageing and degenerative brain diseases.

5. (Amended) A method ~~Use of compounds~~ according to claim 1, ~~for the preparation of pharmaceutical or nutraceutical compositions~~ wherein said composition is useful for restoring the membrane fluidity of ghost cells and blood platelets.

6. (Amended) A method ~~Use of compounds~~ according to claim 1, ~~for the preparation of compositions of~~ wherein said compositions are effective as nutritional integrators ~~aimed at~~ for weight loss, the prevention and treatment of cellulite, the strengthening of muscle and the improvement of physical fitness in humans and animals.

7. (Amended) A method ~~Use of compounds~~ according to claim 1, ~~for the preparation of~~ wherein said composition is in the form of a cosmetic ~~compositions~~ that is useful in the treatment and prevention of skin damage caused by free radicals.

8. (Amended) A method ~~Use according to any one of claims 1 to 7~~ claim 1, wherein ~~the compounds comprise~~ said compound comprises from 25 to 31 carbon atoms.

9. (Amended) A method according to claim 1, ~~Use according to any one of claims 1 to 7,~~ wherein ~~the compounds are of~~ said compound has the general formula $R_2 = R_1\text{-}X$, wherein X has the meaning defined above and wherein R_1 and R_2 have a total of from 23 to 35 carbon atoms, preferably from 25 to 31 carbon atoms, and R_1 is a saturated linear hydrocarbon chain having from 4 to 15 carbon atoms and R_2 is a hydrocarbon chain having from 8 to 22 carbon atoms which is saturated or unsaturated, including from one to four ethylenic or acetylenic unsaturations, linear or optionally branched, including from one to four methyl branches, and optionally substituted by from one to three hydroxyl groups.

10. (Amended) A method ~~Use of compounds~~ as defined in claim 9, wherein R_1 is a hydrocarbon chain having from 7 to 13 carbon atoms and R_2 is a hydrocarbon chain having from 10 to 20 carbon atoms.

11. (Amended) A method according to claim 9, ~~Use according to claim 9 or 10,~~ wherein R_1 is a linear hydrocarbon chain having 9 carbon atoms and R_2 is the chain of a saturated or unsaturated naturally occurring fatty acid.

12. (Amended) A method ~~Use~~ according to claim 10, wherein R_2 is a hydrocarbon chain of oleic, linoleic, linolenic, ricinoleic or farnesylic acid.

13. (Original) Compounds of the general formula

$$R_2=R_1\text{-}X,$$

wherein X is a primary alcoholic functional group $-CH_2OH$, a carboxylic functional group –COOH or a C_1-C_4 alkyl ester group,

wherein R_1 and R_2 have a total of from 23 to 35 carbon atoms and R_1 is a saturated linear hydrocarbon chain having from 4 to 15 carbon atoms and R_2 is a hydrocarbon chain having from 8 to 22 carbon atoms which is saturated or unsaturated, including from one to four ethylenic and/or acetylenic unsaturations, linear or optionally branched, including from one to four methyl branches, and optionally substituted by from one to four hydroxyl groups, their pharmaceutically acceptable salts and mono-, di- and tri-glycerides of acids $R_2 = R_1\text{-}COOH$.

14. (Original) Compounds according to claim 13, wherein R_1 is a hydrocarbon chain having from 7 to 13 carbon atoms and R_2 is a hydrocarbon chain having from 10 to 20 carbon atoms.

15. (Amended) Compounds according to claim 13 ~~or 14~~, wherein R_1 is a saturated linear hydrocarbon chain having 9 carbon atoms.

16. (Amended) Compounds according to claim 12, ~~any one of claims 12 to 15,~~ wherein R_2 is the hydrocarbon chain of a naturally occurring fatty acid.

17. (Amended) Compounds according to claim 13 ~~claims 13 to 16~~, selected from the group consisting of:

- octacosa-10,19-dienoic acid,
- octacosa-10,19,22-trienoic acid,
- octacosa-1,19,22,25-tetraenoic acid,
- 14,18,22-trimethyltricosa-10,13,17,21-tetraenoic acid,
- corresponding primary alcohols, and
- C_1-C_4 alkyl ester of those acids.

18. (Original) Compounds according to claim 17, in the form of the ethyl ester.

19. (Amended) Pharmaceutical, nutraceutical, dietetic integrator or cosmetic compositions including a compound as defined in ~~claims 1, 8 or 13 to 18~~ 13 in association with anti-oxidant vitamins, carnitine or its alkanoyl derivative.

20. (New) A method according to claim 1 wherein said composition is pharmaceutically useful for the treatment and prevention of pathologies related to a high concentration of cholesterol and lipids, and pathologies associated with an increased ability of blood platelets to aggregate and with a reduced concentration of oxygen.